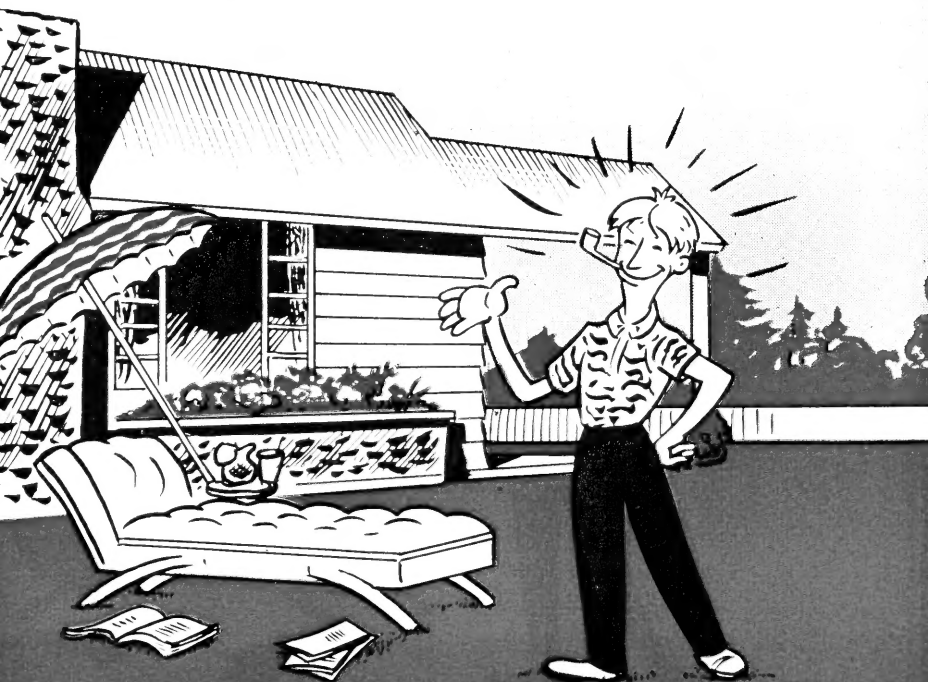


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# How to Build and Maintain your Lawn



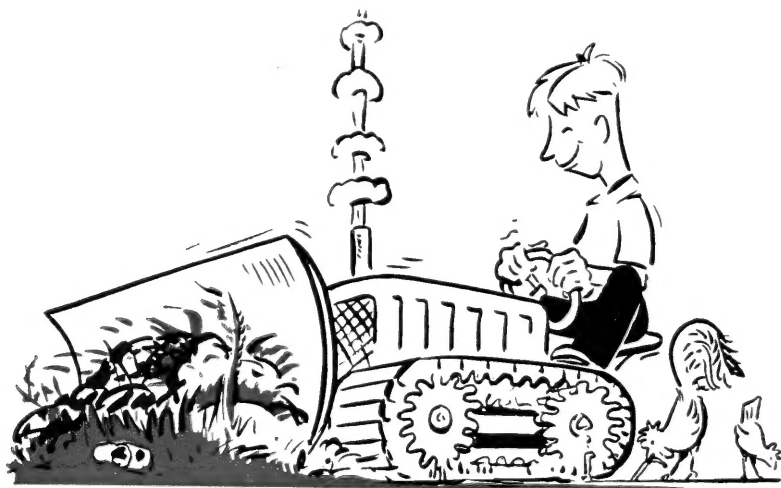
# HOW TO BUILD AND MAINTAIN YOUR LAWN

There are no short cuts to a good lawn. Even as the home is planned and built, so should the lawn be planned and built, if satisfactory results are to be obtained. The foundation of your lawn, the seed bed, and selection of proper seed are just as important as any other foundation. Skyscrapers, homes or lawns are all dependent on sound foundations.

**SOIL PREPARATION**—should be the first step in lawn building. Remove any debris, old grass and weeds. Do not turn under old vegetation. The top six to eight inches of a seed bed should be light, springy and capable of retaining moisture. Peat Moss or well rotted manure may be used for this purpose.

If the natural soil is the heavy or adobe type, applications of soil conditioners, Gypsum, or Lime may prove beneficial. Your Volkman dealer can give you specific recommendations.

**SPRINKLER SYSTEM**—should now be installed if included in your plans.



**GRADING, LEVELING, RAKING AND ROLLING**—of the seed bed is now in order. Plan to grade with slope away from the house and as gentle as possible. As soon as the rough grade level is obtained by raking, the area should be *thoroughly soaked*—until the soil won't absorb another drop of water. This will settle the seed bed and will reveal high and low spots which must be corrected to insure a firm uniform foundation for the lawn. Remove the high spots and fill depressions by further raking, followed by additional rolling and later soaking. Soil texture of the seed bed should be free of lumps. Too much emphasis cannot be placed on the importance of the leveling process. High spots in an established lawn usually suffer from lack of moisture and low spots do not drain well.

## SELECTION OF SEED—

The seed selection chart which appears on the back of this folder will assist in the selection of the proper seed varieties for your lawn.

Experts do not recommend combining coarse-leaved, fast-growing grasses with fine-leaved, slow-growing grasses in lawns, as such mixtures result in lack of uniformity, rate of growth and maintenance requirements, factors so desirable in a lawn. Many times when fast-growing, fast-germinating grasses are seeded with the slower varieties, much, if not most of the slower growing and germinating grasses are lost completely as the grower stops watering after the faster grasses are off to a good start, but before the slow types have germinated. Select a mixture with either all slow-growing grasses or all fast-growing grasses and in this manner assure yourself of uniformity in your lawn.

A dollar's worth of "very best" seed will cover a greater area than a dollar's worth of "cheap" seed, although poundage will be less. Many mixtures of fine-leaved high quality grasses are actually cheaper per square foot to use, though they cost more per pound. Permanent long-lived fine-leaved grasses provide a better appearing turf, than do the coarser, fast-growing grasses. Many "cheap" or "inferior" grass seeds are offered for sale. They are usually sold on the basis of price per pound which is the wrong way to buy seed. One pound of fine-leaved mix will sow 250 to 300 square feet. One pound of a "cheap" mix may cover only 75 to 100 square feet.

**USE THE RIGHT AMOUNT OF SEED** — The theory that if a little is good, more is better, certainly does not apply when seeding a lawn. The recommended rates of seeding have been carefully worked out to insure best results. To use more seed than is recommended results in a condition of crowded plants, causing individual lawn plants to fight for existence, thus weakening the sod and making the lawn easy prey for disease.

**SEEDING**—Do not attempt to seed by hand when a strong wind is blowing as grass seeds are light and may be blown to spots in the garden where you don't want grass to grow. Since even distribution of seed is essen-





tial, use a fertilizer spreader for this task whenever possible or practical.

When using a spreader it is recommended that seed, fertilizer and sand be thoroughly mixed together before filling the hopper.

Assuming that 200 square feet are to be covered with each batch, use 8 pounds fertilizer plus the recommended quantity of lawn seed for 200 square feet and sufficient sand to fill the hopper. Select a balanced

commercial fertilizer (6-9-6 or 5-10-5) containing phosphate as well as nitrogen and potash to insure your lawn making a good early start.

This practice will insure the seed at hand covering the total area and will also result in even distribution of the fertilizer. The sand will add bulk and tell where you have seeded.

If a spreader is not available, hand broadcast the seed and fertilizer.

It is recommended that the seed mixture to be hand sown be divided into five equal parts. Mark the area to be sown into four equal sections and sow each section with one part of seed. Allow the seed to drop at least three feet to insure proper spread and most uniform coverage can be obtained by broadcasting half the seed in one direction; the balance at right angles.

When seeding of these four areas has been completed, one portion of the seed will remain unused. In the event your calculations were correct, the fifth package may be evenly distributed over the entire area or retained to seed possible future bare spots.

After sowing, cover to a depth of  $\frac{1}{8}$  to  $\frac{1}{4}$  inch with fine peat moss, sand or loam, and roll lightly.

**WATERING**—Water should be applied to seed bed slowly and gently with a *very* fine spray, thoroughly soaking the seeded area. Do not let water puddle on top or run at any time as this will tend to wash away the seed. Watering should take place as often as weather conditions demand. Keep seeded area *constantly* moist for ten days to two weeks, after the first grass seedlings appear. Continuing the watering after the first grass appears, insures the germination of slower starting grasses. This is important because some of our best lawn grasses are slow in germinating. A single day's neglect may mean drying, crusting of top layer of soil and complete loss of the seed.



**MOWING**—Your lawn mower should be extra sharp for that first mowing; otherwise you may uproot the tender new grass plants instead of clipping them. Begin mowing when the grass is two inches high. Do not leave cuttings on the new lawn as they spoil the appearance and on a young lawn, may if heavy, smother and kill the tender grass. Weather permitting, mow whenever lawn puts on half an inch of growth.

**EARLY MAINTENANCE**—If the grass comes up unevenly, appears weak and is a yellowish green color, it usually indicates the need of plant food. Fertilizer should be applied about once a week in small quantities to avoid burning the tender grass until the lawn is established. Uniform application of fertilizer is essential, otherwise uneven growth will result. Mechanical fertilizer spreaders or liquid fertilizers should be used. Do not be too concerned if some weeds appear. Most of these will disappear with mowing. Should any persist, they may be eradicated at a later date with selective weed killers.



**FERTILIZATION**—Established lawns should be fertilized at regular intervals. For maximum beauty, lawns should be fed at the rate of one-half to one pound of



nitrogen per 1000 square feet per month. Translated into commercial fertilizer standards, 8 to 16 pounds of a 6% nitrogen fertilizer or 2½ to 5 pounds of a 20% nitrogen plant food would be required. It may be necessary to use a carrier such as water, sand or loam to apply the above quantities evenly over 1000 square feet. High nitrogen water soluble plant foods can best be applied in liquid form. During hot summer months use organic fertilizers. See your dealer for advice and equipment.

Fertilizers may be applied in liquid or granular form, but should be *thoroughly* watered *immediately* after application. Frequent light applications will minimize the danger of burning your lawn. Do not apply dry chemical fertilizers to grass that is wet, either from dew or from watering. Apply dry chemical fertilizers to dry lawns. Then water well.

**WATERING** — It is very important to maintain the proper moisture conditions for your lawn. *Excessive or inadequate* watering is equally harmful. The best method of irrigating your lawn is to thoroughly soak at *one watering*, being sure moisture penetrates to a depth of at least six inches. A good mechanical sprinkler is recommended, as hand watering about homes usually means hasty and inadequate watering. Generally speaking, one inch of water will penetrate the soil to about six inches. You may determine how long it will take your sprinkler to carry this much water to the soil by using several empty coffee cans, placed in a line from the nearest to farthest reaches of sprinkler on the lawn to catch water. In this manner you can determine whether or not your sprinklers are delivering equitable amounts of water to your lawn, or you can plug your lawn as you would a watermelon, replacing the plug, to determine how far down your watering operations had carried. By using this method, in a relatively short time, you will be able to determine, within minutes, the length of time required to soak your lawn to the desired depth.

Without question, *frequent shallow watering is the cause of more lawn troubles* than most any other single reason. Roots will follow moisture and once the root system has been developed to a depth of at least six inches you will save on your water bill by virtue of less frequent irrigations and less water wasted.



**INSECT CONTROL** — The most common lawn insect is the Lawn Moth or Sod Webworm. Gray moths usually visible at dusk, fly low over the lawn when infestation occurs. Since prompt remedial action is essential, the following test to determine the presence of Sod Webworm should be made. Thoroughly water the affected area and then apply a pyrethrum or lindane solution around the outer edge. If Sod Webworms are present they will





come to the surface within a few minutes. The worm is gray, boomerang shaped, and approximately  $\frac{3}{4}$  inch in length. Your seed dealer can supply necessary insecticides for effective control.



**DISEASE CONTROL** — Brown spots may occasionally appear in your lawn and can be caused by the following: Dried areas or spots caused by dogs can be improved by aerifying the sod followed by thorough watering. Sod Webworms cause the most serious of the brown spots and effective remedies are explained below. Should the area in question be due to fungus disease, Mercuric compounds readily available from your seed dealer, are effective remedies.



**WEED CONTROL** — Eradication of weeds from the modern lawn is no longer a back-breaking chore. Hand weeding can practically be eliminated through the use of selective weed killers applied in liquid or dry form. These preparations are easy to apply and most effective. Consult your seed dealer for recommendations.

Building a lawn is not a difficult operation, but *it takes time and every step should be given careful consideration.* Usually the lawn area is the very foundation of your home garden. Nearly all plantings of flowers, trees and shrubbery are planned to coincide with and to complement this lawn. Give your lawn the attention needed to preserve and help its natural will to grow and you can have truly "a Lawn of distinction."



The lawn seed supplied to your dealer by C. M. Volkman & Co. has been carefully selected from the best that world markets afford for high purity, high germination and low weed content. Volkman's Fine-leaf Lawn Seed has been scientifically treated as a precaution against soilborne fungus diseases for your added protection and insured satisfaction. Consult your dealer relative to selection of seed. He has the latest information available for you.

# SEED SELECTION CHART

Name of Item	Texture	Relative Germination Time	Sq. Ft., lb. Seed	Soil Tolerance Range	Weather Range	General Information
Astoria Bent Colonial Bent ( <i>Agrostis tenuis</i> )	Fine	Medium	400	Neutral, acid, lime	Resistant to cold. Does not do well in extreme heat	Very fine leaved, upright growth, dark green color, underground creeper.
Highland Bent ( <i>Agrostis tenuis</i> )	Fine	Medium	400	Neutral, acid	Moderate heat and resistant to cold	Fine leaved, upright growth, medium green color. Strong underground creeping root stocks.
Seaside Bent ( <i>Agrostis palustris</i> )	Fine	Medium	400	Neutral, acid	Moderate heat and resistant to cold	Very fine leaved, vigorous top creeper, light green color. Must be raked and closely cut to prevent so-called "grain on turf" and matting.
Delta Blue ( <i>Poa pratensis</i> )	Fine	Slow	300	Neutral, slightly of acid, very of lime	Resistant to hot weather	Coarser than Kentucky Bluegrass, upright growth, good dark green color, resistant to disease.
Kentucky Blue ( <i>Poa pratensis</i> )	Fine	Slow	300	Neutral, slightly of acid, very of lime	Resistant to cold but not extreme hot weather	Moderately fine leaved, upright growth from creeping root stocks, bluish green color. Withstands winter freezing. Responds to lime treatments where acidity is excessive.
Merion Blue (B-27) ( <i>Poa pratensis</i> )	Fine	Slow	500	Neutral, slightly of acid, very of lime	Resistant to cold but not extreme hot weather	Slightly coarser than Kentucky Blue, upright growth, good green color, strong creeping root stocks, will form dense sod, resistant to disease. Best if planted alone.
Chewings Fescue ( <i>Festuca rubra</i> , var. <i>commutata</i> )	Fine	Medium	150	Neutral, acid, lime	Fairly tolerant to heat and resists cold	Fine wiry leaves, upright growth, dark green color. Also good for shady spots. Spiking necessary to perforate root mats, especially in heavy soil; very hardy.
Creeping Red Fescue ( <i>Festuca rubra</i> , var. <i>genuina</i> )	Fine	Medium	150	Neutral, acid, lime	Resistant to cold, fairly tolerant of heat	Fine leaved, upright growth, dark green color, creeping root stocks. Also good for shady spots.
Illahee Creeping Red Fescue ( <i>Festuca rubra</i> , var. <i>illahee</i> )	Fine	Medium	150	Neutral, acid, lime	Resistant to cold, fairly tolerant of heat	A selection of Creeping Red Fescue, darker green than Creeping Red Fescue; slow creeping root stocks. Good for shady spots.
Rainier Creeping Red Fescue ( <i>Festuca rubra</i> )	Fine	Medium	150	Neutral, acid, lime	Resistant to cold, fairly tolerant of heat	A selection of Creeping Red Fescue. Fine leaved; darker green and more vigorous underground creeper than other fescues. Also good for shady spots.
Alta Fescue ( <i>Festuca arundinacea</i> )	Coarse	Medium	100	Neutral, acid, lime	Fairly tolerant of heat and resists cold	Coarse-leaved, upright growth, medium green color. Can be used where durability outranks appearance.
Goar's Fescue ( <i>Festuca arundinacea</i> , var. <i>goars</i> .)	Coarse	Medium	100	Neutral, acid, lime	Fairly tolerant of heat and resists cold	Coarse-leaved, upright growth, medium green color. Can be used where durability outranks appearance.
Meadow Fescue ( <i>Festuca elatior</i> )	Coarse	Medium	150	Neutral, acid, lime	Temperate	Coarse leaved, upright growth, dark green color.
Red Top ( <i>Agrostis alba</i> )	Coarse	Fast	300	Neutral, acid, lime	Resistant to cold, fairly tolerant of heat	At maturity resembles and often mistaken for Crabgrass, leaves become coarse, sprawling growth, light dull green color. Seed similar in appearance to bent grass seed.
Common Ryegrass, Domestic, Italian ( <i>Lolium multiflorum</i> )	Coarse	Fast	100	Neutral, acid, lime	Cold, not tolerant of excessive heat	Coarse-leaved, upright growth, bright shiny green color, inclined to bunch. Will persist in irrigated turfs. Sharp mower required to prevent shredding of this grass.
Perennial Ryegrass, Australian, English ( <i>Lolium perenne</i> )	Coarse	Fast	100	Neutral, acid, lime	Cold, not tolerant of excessive heat	Coarse-leaved, upright growth, bright shiny green color. Frequent mowing is advisable with sharp mower. Has tendency to bunch in time.
<b>SPECIALTY ITEMS</b>						
Bermuda Grass ( <i>Cynodon dactylon</i> )		Slow	300	Neutral, lime, alkali. Some salt if area is well drained	Hot weather only. Dormant during cold weather	Use only in hot climates and where other grasses will not survive. Creeps above and below ground, requires periodic renovation. Very deep rooted and becomes a pest if not confined. Turns brown in winter. Use prohibited in some California counties.
Rough Stalk Meadow Grass ( <i>Poa trivialis</i> )		Slow	300	Neutral, acid if rich and well drained	Resistant to cold but not hot weather	Medium fine leaved, upright growth, bluish green color. Requires spiking to prevent bunching. Good for shade.
White Clover ( <i>Trifolium repens</i> )		Fast	300	Neutral, lime	Moderate heat and tolerant of cold	Round leaved, spreading growth, bright green color. Use sparingly in mixtures. Very succulent, will stain clothing.



Specify Volkman's Lawn Mixtures to insure your complete satisfaction. They have been specially formulated for California lawns, giving careful consideration to soils, climatic differences and usage.



**Volkman's Fineleaf Lawn Mixture** — A select mixture of fine-textured, premium quality permanent lawn grasses. Designed for sun or partial shade; will produce an even-textured, slow-growing lawn of deep green color. — Nothing Better. — This lawn will satisfy the most discriminating home owner.

**Volkman's Improved Park Mixture** — A blend of durable, perennial grasses for an easily established lawn. Excellent for patios and areas of heavy traffic.

**Volkman's Merion Bluegrass** — Requires less mowing and less water than other grasses. A slow-growing, medium-textured, deep-rooted and drought-resistant grass. Will resist invasion of some common weeds. Not recommended in lawn seed mixtures.

**Volkman's Valley Lawn Mixture** — Recommended for a durable lawn in California's interior valleys, where extreme weather conditions call for grasses which possess a wide range of adaptation.

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